

References:

1. S.M. Sze , in "*Semiconductor Devices*" ,(John Wiley & Sons, New York) (1985) 2.
2. W.E spear and P. G. Lecomber, *Solid State commun.*, **17** (1975) 1193.
3. W.Paul, A.J Lewis, G.A.N. Connell and T.D. Moustakas, *Solid State Commun.*, **20** (1976) 969.
4. W.E. Spear, P.G. Lecomber, S.Kinmond and M.H Brodsky, *Appl. Phys. Lett.*, **28** (1976) 105.
5. D.E. Carlson and C.R. Wronski, *Appl. Phys. Lett.*, **28** (1976) 671.
6. C.R. Wronski, D.E. Carlson and R.E. Daniel, *Appl. Phys. Lett.*, **29** (1976) 602.
7. J.I. Pankove and D.E. Carlson, *Appl. Phys. Lett.*, **29** (1976) 620.
8. Y. Nakayama, K. Wakita, M. Nakano and T. Kawamura, *J. Non-Cryst. Solids*, **59/60** (1983) 1231.
9. A.E. Owen, P.G. Lecomber, W.E. Spear and J. Hajto, *J. Non-Cryst. Solids*, **59/60** (1983) 1273.
10. A.J. Snell, P.G. Lecomber, K.D. Mackenzie, W.E. Spear and A. Doghmane. *J. Non-Cryst. Solids*, **59/60** (1983) 1187.
11. T. Hamakawa, *J. Non-Cryst. Solids*, **59/60** (1983) 1265.
12. Y. Kuwano, in "*Materials Issues in Amorphous-Semiconductors Technology*", edited by D. Adler, Y. Hamakawa and A. Madan, *Mater. Res. Soc. Proc.* 70, Pittsburgh, PA (1986) 455.
13. I. Shimizu, *J. Non-Cryst. Solids*, **77/78** (1985) 1363.

14. H. Miki, S. Kawamota, T. Hozikawa, T. Maejima, H. Sakamoto, M. Hayama and Y. Onishi, in "*Amorphous Silicon Semiconductors- Pure and Hydrogenated*", edited by A. Madan, M. Thompson, D. Adler and Y. Hamakawa, *Mater. Res. Soc. Proc.* 95, Pittsburgh, PA (1987) 431.
15. H. Ho, Y. Nishihara, M. Nobue, M. Fuse, T. Nakamura, T. Ozawa, S. Tomiyama, R. Weisfield, H. Tuan and M. Thompson, *IEDM Tech. Digest*, Washington D.C. (1985) 436.
16. S. Kanebo, Y. Kajiwara, F. Okumura and T. Ohkubo, in "*Material Issues in Applications of Amorphous Silicon Technology*", edited by D. Adler, A. Madan and M. Thompson (*Mater. Res. Soc. Proc.* 49, Pittsburgh, PA (1985) 423.
17. M.J. Thompson and H.C. Tuan, *IEDM Tech. Digest*, Los Angeles (1986) 192.
18. Stephen K. O'Leary, Stefan Zukotynski, John M. Perz, *J. Non-Cryst. Solids*, **210** (1997) 249.
19. B.G. streetman, in "*Solid state electronic Devices*", 3rd ed. (Prentice -Hall of India, New Delhi) (1991) 4.
20. Dilip K. Roy, in "*Physics of semiconductor devices*", (Universities Press, India) (1992) 42.
21. Charles Kittel, "*Introduction to solid State Physics*", 6th ed. (John Wiley & Sons, Inc., singapore, New york, Chichester, Brisbane, Toronto) (1991) 203.
22. Donald A. Neamen, "*Semiconductor Physics and Devices*", (Richard D. Irwin, inc., USA) (1992) 718.
23. Dilip K. Roy, in "*Physics of semiconductor devices*", (Universities Press, India) (1992) 12.

24. Dilip K. Roy, in "*Physics of semiconductor devices*", (Universities Press, India) (1992) 17.
25. Dilip K. Roy, in "*Physics of semiconductor devices*", (Universities Press, India) (1992) 22.
26. S.M. Sze, "*Physics of Semiconductor Devices*", 2nd ed. (Wiley Eastern Limited, New Delhi) (1981) 40.
27. D.E. Carlson, Amorphous Thin film Devices, in "*Polycrystalline & Amorphous thin film and devices*", edited by Lawrence R. Kamerski (Academic Press, New York), (1980) 175.
28. G.A.N. Connell and J.R. Pawlik, *Phy Rev B*, **13**, (1967) 787.
29. A.H. Mahan, J. Carapella, B.P. Nelson and R.S. Crandall, *J. Appl. Phys.* **69**(no.9) (1991) 6728.
30. R.C. Chittick, J.H. Alexander and H.F. Sterling, *J. Electrochem. Soc.*, **116** (1969) 77.
31. P. Nagels, "Electronic Transport in Amorphous Semiconductors", in *Topics in Applied Physics*, edited by M.H. Brodsky, (Springer-Verlag), **36** (1979) 113.
32. P.W. Anderson. *Phys. Rev.*, **109** (1958) 1492.
33. N.F. Mott. *Philos. Mag.*, **22** (1970) 7.
34. M.H. Cohen, H. Fritzsche, S.R. Ovshinsky, *Phys. Rev. Lett.*, **22** (1969) 1065.
35. E.A. Davis, N.F. Mott, *Philos. Mag.*, **22** (1970) 903.
36. N.F. Mott, "*Electrons in Non-crystalline Materials*", in Electronic and structural properties of Amorphous Semiconductors, edited by P.G. Lecomber, J. Mort (Academic Press New York) (1973) 1.

37. N.F. Mott, *Philos. Mag.*, **19** (1969) 835.
38. N.F. Mott and E.A. Davis, "Electronic Processes in Non-Crystalline Material" (OUP) (1979) 209.
39. Yoshihiro Hishikawa, Noboru Nakamura, Shinya Tsuda, Shoichi Nakano, Yasuo Kishi and Yukinori Kuwano, *Jpn. J. Appl. Phys.*, **30** (1991) 1008.
40. R. Swanepoel, *J. Phys. E. Sci. Instrum.*, **16** (1983) 11.
41. S.H. Wemple and M.Di. Domenico, *J. Phys. Rev. B*, **3** (1971) 1338.
42. C. Ance, J.P. Feratton, J.M. Berger and F. De Chelle, *Phys. Stat. Sol.*, **113** (1982) 105.
43. S.H. Wemple, *Phys. Rev. B*, **7** (1973) 3767.
44. M.H. Brodsky, "Introduction", in "Topics in Applied Physics", edited by M.H. Brodsky (Springer-Verlag), **36** (1979) 1.
45. Adam Lewis, *Phys. Rev. Lett.*, **29** (no.23) (1972) 1555.
46. Hajime Shirai, Jun-ichi Hanna and Isamu Shimizu, *Jap. J. Appl. Phys.*, **30** (no.4B) (1991) L.679.
47. A. Daneuville, A. Mini and J.C. Bruyere, *J. Phys. C. Solid State Phys.*, **14** (1981) 4531.
48. Sorab K. Gandhi, in "VLSI Fabrication Principles", (John Wiley & Sons, New York) (1983) 287.
49. L.B. Valdes, *Proceedings of the IRE*, **42** (1954) 420.
50. Instruction manual for "Speedivac" Edward's vacuum coating units models 12EA and 12E3, M11620/2 (1964) 3.

51. A.L. Dawar, K.V. Ferdinand, C. Jagdish, Partap Kumar and P.C. Mathur, *J. Phys. D: Appl. Phys.*, **16** (1983) 2349.
52. J.C. Manificier, J. Gasiot and J.P. Fillard, *J. Phys. E*, **9** (1978) 1002.
53. E.A. Davis, N. Piggins, S.C. Bayliss, *J. Phys. C. Sol. Stat. Phys.*, **20** (1987) 4415.
54. M.H. Brodsky, R.S. Title, K. Weiser, G.D. Pettit, *Phys. Rev. B*, **1** (no.6) (1970) 2633.
55. S.K. Bahl, S.M. Bhagat, *J. Non-Cryst. Solids*, **17** (1975) 418.
56. 39-1425, 39-973, JCPDS-ICDD "PDF-2 Sets 1-45 database", Copyright © (1995).
57. M.G. Bawendi, A.R. Kortarr, L. Steigerwald and L.E. Brus, *J. Chem. Phys.*, **91** (no 11) (1989) 7282.
58. R.J. Cross and F. Glockling, *J. Organomet. Chem.*, **3** (1965) 146.
59. E. Carberry, B.D. Dombek and S.C. Cohen, *J. Organomet. Chem.*, **36** (1972) 61.
60. G. Lucovsky, S.S. Chao, J. Yang, J.E. Tyler and W. czubatyj., *J. Non-Cryst. Solids*, **66** (1984) 99.
61. W. Metlesics and H. Zeiss, *J. Am. Chem. Soc.*, **82** (1960) 3324.
62. M.H. Brodsky, M. Cardona and J.J. Cuomo, *Phys. Rev B*, **16** (1977) 3556.
63. E.C. Freeman and W. Paul, *Phys. Rev B*, **18** (1978) 4288.
64. G. Lucovsky and T.M. Hayes, "Short Range Order in Amorphous Silicon", series on "Amorphous Semiconductors" edited by M.H. Brodsky, (Springer-Verlag, Berlin Heidelberg) (1979) 215.
65. P.G. Pai, S.S. Chao and Y. Tagaki, *J. Vac. Sci. Technol.*, **A4** (1986) 689.
66. V.A. Singh, C. Weigel, J.W. Corbett and L.M. Roth, *Phys. Status. Solidi (b)*, **81** (1977) 637.
67. G. Lucovsky, W.S. Pollard, *Physica B & C*, **117/118** (1983) 865.

68. G. Lucovsky, J. Yang, S.S. Chao, J.E. Tyler, W.C. Zubatyj, *Phys. Rev B*, **28** (no.6) (1983) 3225.
69. J. Chevallier, S.Kalem, S.A1 Dallal, J. Bourniex, *J. Non-Cryst Solids*, **51** (no.3) (1982) 277.
70. J. Chevallier, S. Kalem, J. Bourniex, M. Vandeuyver, *Physica B & C*, **117/118** pt.2 (11983) 874.
71. S. Kalem, J.Chevallier, S.A1 Dallal, J. Bourniex, *J. Phys. Colloq.*, **42** (no. C-4) pt.1 (1981) 361.
72. Wu Zhi-Qiang et. al, *J. Non-Cryst. Solids*, **59/60** pt.1 (1983) 217.
73. G. Lucovsky, R.J. Nemanich, J.C. Knights, *Phys. Rev B*, **19** (1979) 2064.
74. S.M. Sze, in "*Semiconductor Devices*", (John Wiley & Sons, New York) (1985) 513.
75. M.P. Brown, R. Okawara and E.G. Rochow, *Spectrochem. Acta*, **16** (1960) 595.
76. N.A. Chumaevskii, *Opt. Spectr.*, **13** (1962) 68.
77. S.M. Sze, in "*Semiconductor Devices*", (John Wiley & Sons, New York) (1985) 257
78. G. Talukder, J.C.L. Cornish, P. Jennings, G.T. Hefter, M. Jain, J.L. Robins, J. Livingstone, *Thin Solid Films*, **223** (1993) 167.
79. D.K. Biegelsen, R.A. Street, C.C. Tsai, and J.C. Knights, *Phys. Rev B*, **20** (no.12) (1979) 4839.
80. N.M. Ravindra, C. Ance, J.P. Ferraton, J.M. Berger, F.De Chelle and S. Robin, *Infrared Phys.*, **23** (1983) 99.
81. P.M. Martin and W.T. Pawlewicz, *Sol. Energ. Mat.*, **2** (1979/80) 143.

82. K. Tanaka et. al, *Jpn. J. Appl. Phys. Suppl.*, no. 20-1 (1980) 267.
83. A. Daneuville, A. Mini and J.C. Bruyere, *J. Phys. C: Solid State Phys.*, **14** (1981) 4531.
84. A. Daneuville, J.C. Bruyere, A. Mini, H. Kahil, R. Danielou and E. Ligeon, *J. Non-Cryst. Solids*, **35/36** (1980) 469.
85. J. Zemek, M. Zavetova and S. Koc, *J. Non-Cryst. Solids*, **37** (1980) 15.
86. P. Chaudhuri, Swati Ray and A.K. Barua, *Thin Solid Films*, **113** (no.4) (1984) 261.
87. E.C. Freeman and W. Paul, *Phys. Rev. B*, **20** (1979) 716.
88. S.M. Sze, in "*Semiconductor Devices*", (John Wiley & Sons, New York) (1985) 48.
89. D.K. Paul and S.S. Mitra, *Phys. Rev. Lett.*, **31** (no.16) (1973) 1000.
90. D. Lemoine and J. Mendolia, *Phys. Lett.*, **82A** (no.8) (1981) 418.
91. P. Nagels, in "*Amorphous Semiconductors*" edited by M.H. Brodsky, (Springer-Verlag), **38** (1979) 125.
92. G.L. Squires, "Practical Physics", (McGraw-Hill Book Co.,) (1976) 36-37, 50-52.